

FROH 202 (10200553)

1. (Amended) Audio signal sound diffusion system, comprising:
 - at least one diffuser;
 - at least one amplifier connected to said at least one diffuser;
 - a generation circuit connected to said at least one amplifier for generating at least one audio signal;
 - a control circuit for controlling said sound diffusion system adapted to detect malfunctions of said diffusion system and to generate an appropriate status alarm of said diffusion system in response thereto; and
 - connection means adapted to connect said control circuit to a management system,said control circuit being adapted to send to said management system at least one status alarm of said sound diffusion system, said status alarm signal indicating which of a plurality of malfunctions has occurred.
2. (Amended) The sound diffusion system of claim 2, wherein said audio signal is an alarm signal.
3. (Amended) The sound diffusion system of claim 2, wherein a local control for the manual activation of said at least one alarm signal.
4. (Amended) The sound diffusion system of claim 1, wherein said at least one status alarm indicates a malfunction selected from the list of: lack of mains voltage, failure of said at least one amplifier, failure of said at least one diffuser, and a charge state of reserve batteries for powering said diffusion system in the event of lack of mains voltage.
5. (Amended) The sound diffusion system of claim 1, wherein said control circuit comprises a test circuit adapted to cyclically check the correct operation of said at least one amplifier.
6. (Amended) The sound diffusion system of claim 1, wherein said control circuit comprises a test circuit adapted to cyclically check the correct operation of said at least one diffuser.